Notice of ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initial of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.  1. □ This communication is responsive to  2. ☑ The allowed claim(s) is/are 1-22.  3. ☑ The drawings filed on 24 June 2003 are accepted by the Examiner.  4. □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) □ All b) □ Some* c) □ None of the:  1. □ Certified copies of the priority documents have been received.  2. □ Certified copies of the priority documents have been received in Application No  3. □ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements neted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  5. □ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.  6. □ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  (a) □ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  1) □ hereto or 2) □ to Paper No./Mail Date  (b) □ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.  Attachment(s)  1. □ Notice of References Cited (PTO-892)  3. □ Notice of References Cited (PTO-492)  4. □ Notice of References Cited (PTO-414) or PTO/SB/08), Paper No./Mail Date				$\mathcal{M}$
Notice of Allowability    Examiner   Dean O Takaoka   2817		Application No.	Applicant(s)	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address- All claims being allowable. PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herevith (or proviously mailed). a Notice of Indownece (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initial of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.  1. □ This communication is responsive to  2. □ The allowed claim(s) is/are 1-23.  3. □ The drawings filed on 24 June 2003 are accepted by the Examiner.  4. □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) □ All □ b) □ Some* o) □ None of the:  1. □ Certified copies of the priority documents have been received.  2. □ Certified copies of the priority documents have been received in Application No  3. □ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Falure to limely comply will result in ASANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  (a) □ Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  1) □ heroto or 2) □ to Paper No./Mail Date		10/602,983	BYRNE ET AL.	
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4. ☐ Examiner's Comment Regarding Requirement for Deposit  8. ☑ Examiner's Statement of Reasons for Allowance			endment/Comment	
of Biological Material 9. ☐ Other			ement of Reasons for Allow	ance
	of Biological Material	9.		

## **DETAILED ACTION**

## Allowable Subject Matter

Claims 1 - 23 are allowed.

The following is an examiner's statement of reasons for allowance:

Dionne shows a tunable microwave ferrite filter comprising a switchable ferrite microwave device, the switchable ferrite microwave device comprised of a gapped ferrite structure where coils are wound around the ferrite structure. While Dionne teaches reducing HM curve between saturation points (c7, lines 31-35) Dionne does not address reduction of saturation of the ferrite material with respect to frequency and does not indicate any suppression of current at a second frequency (claims 1, 11 and 21). Dionne teaches providing a gap in a toroid to provide variable magnetization points between two saturation points (Ha and Hb – Fig. 3b).

Morrill shows a tunable noise controller comprising a ferrite toroid (T1) and variable resistor (P1) but does not teach reducing saturation of the ferrite material at the first frequency allowing the ferrite material to suppress current at the second frequency (claims 1, 11 and 21). Morrill does not address saturation or reduction of saturation with respect to frequency and does not indicate any suppression of current of a second frequency. Morrill provides a noise cancellation device with noise phase cancellation of 180°.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably Art Unit: 2817

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dionne – shows a tunable microwave ferrite filter.

Morrill - shows a universal noise controller.

Foley – shows a signal filter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dean O Takaoka whose telephone number is (571) 272-1772. The examiner can normally be reached on 8:30a - 5:00p Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571) 272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

dot August 31, 2004

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